

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2004-19220; Directorate Identifier 2004-CE-27-AD; Amendment 39-14568; AD 2006-08-11]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Pilatus Aircraft Ltd. Models PC-12 and PC-12/45 Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

---

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Pilatus Aircraft Ltd. Models PC-12 and PC-12/45 airplanes equipped with certain crew seat bucket assemblies with and without a backrest recline system. This AD requires you to replace the backrest tubes on these crew seat bucket assemblies at a specified time and adds a life limit for these backrest tubes. This AD results from mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for Switzerland. We are issuing this AD to prevent cracks in the backrest tubes of certain crew seat bucket assemblies, which could result in failure of the seat system. This failure could lead to the pilot and co-pilot's reduced ability to control the airplane. This failure could also affect the proper function of the seat restrain system in the case of an emergency landing.

**DATES:** This AD becomes effective on June 2, 2006.

**ADDRESSES:** For information identified in this AD, contact Pilatus Aircraft Ltd., Customer Support Manager, CH-6371 Stans, Switzerland; telephone: +41 41 619 6208; fax: +41 41 619 7311; or Pilatus Business Aircraft Ltd., Product Support Department, 11755 Airport Way, Broomfield, Colorado 80021; telephone: (303) 465-9099; fax: (303) 465-6040.

To view the AD docket, go to the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001 or on the Internet at <http://dms.dot.gov>. The docket number is FAA-2004-19220; Directorate Identifier 2004-CE-27-AD.

**FOR FURTHER INFORMATION CONTACT:** Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

On February 7, 2006, we issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that would apply to all Pilatus Aircraft Ltd. (Pilatus) Models PC-12 and PC-12/45 airplanes equipped with certain crew seat bucket assemblies with and without a backrest recline system. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on February 14, 2006 (71 FR 7698). The NPRM proposed to require you to replace the backrest tubes on certain crew seat bucket assemblies at a specified time and add a life limit for the backrest tubes.

### **Comments**

We provided the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and FAA's response to each comment:

#### **Comment Issue No. 1: Remove Reference to PC12 Maintenance Manual Temporary Revision No. 04-13, Dated June 15, 2005**

The manufacturer states that PC-12 Interactive Electronic Technical Publication (IETP) Revision 9 (which will include Aircraft Maintenance Manual (AMM) Revision 17) will supersede PC12 Maintenance Manual Temporary Revision No. 04-13, dated June 15, 2005, by March 31, 2006, by incorporating the information into the IETP.

The commenter requests to remove the reference to PC12 Maintenance Manual Temporary Revision No. 04-13, dated June 15, 2005, from the final rule AD action.

We agree with the commenter and will change the final rule AD action.

#### **Comment Issue No. 2: Change the Compliance Time for Replacing Certain Crew Seat Bucket Assemblies**

The manufacturer states the life limit and the compliance time for replacing crew seat bucket assemblies without a recline system, part numbers (P/Ns) 959.30.01.131, 959.30.01.132, 959.30.01.133, and 959.30.01.134 (or FAA-approved equivalent P/Ns), is too conservative. The manufacturer states there have not been any of these seats found with cracks and they have confidence the life limit could be increased from 10,000 hours time-in-service (TIS) to 12,163 hours TIS.

The manufacturer requests the compliance time for initial replacement be increased from "upon the accumulation of 10,000 TIS or within the next 100 hours TIS after the effective date of the AD, whichever occurs later," to "upon the accumulation of 10,000 TIS or within the next 500 hours TIS after the effective date of the AD, whichever occurs later."

We partially agree with the commenter. Since there have not been any reported cracks on the above referenced crew seat bucket assemblies and there is confidence from the manufacturer that there is a 2,163-hour TIS "cushion," we agree that increasing the threshold compliance time from 100 hours TIS to 500 hours TIS can be done without compromising the safety of crew seat bucket assemblies with 10,000 hours or less TIS. For crew seat bucket assemblies with more than 10,000 hours TIS, we have established a compliance time for initial replacement of 100 hours TIS or upon the accumulation of 10,500 hours TIS, whichever occurs later.

We will change the final rule AD action to reflect this change.

## Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed except for incorporating the concerns addressed by the commenter and minor editorial corrections. We have determined that we should incorporate the concerns addressed by the commenter, and that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

## Cost of Compliance

We estimate that this AD affects 260 airplanes in the U.S. registry.

We estimate the following costs to do the replacement:

| Labor cost  | Parts cost  | Total cost per airplane                         | Total cost on U.S. operators   |
|---|---|---|--|
| 3 workhours × \$65 per hour = \$195 per seat bucket assembly. | \$600 per seat bucket assembly. 2 seats on each airplane. | \$195 + \$600 = \$795 per seat bucket assembly. | \$795 per seat bucket assembly × 2 per airplane = \$1,590.<br>\$1,590 × 260 = \$413,400. |

## Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this AD.

## Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD (and other information as included in the Regulatory Evaluation) and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES. Include "Docket No. FAA-2004-19220; Directorate Identifier 2004-CE-27-AD" in your request.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. FAA amends § 39.13 by adding the following new AD:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2006-08-11 Pilatus Aircraft Ltd.:** Amendment 39-14568; Docket No. FAA-2004-19220;  
Directorate Identifier 2004-CE-27-AD.

## Effective Date

- (a) This AD becomes effective on June 2, 2006.

## Affected ADs

- (b) None.

## Applicability

(c) This AD affects Models PC-12 and PC-12/45 airplanes, all serial numbers, that are equipped with the following crew seat bucket assemblies and are certificated in any category:

(1) Crew seats with a recline system, part numbers (P/N): 959.30.01.111, 959.30.01.112, 959.30.01.121, and 959.30.01.122

(2) Crew seats without recline system, P/Ns: 959.30.01.131, 959.30.01.132, 959.30.01.133, and 959.30.01.134

## Unsafe Condition

(d) This AD is the result of mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for Switzerland. The actions specified in this AD are intended to prevent cracks in the backrest tubes of certain crew seat bucket assemblies, which could result in failure of the seat system. This failure could lead to the pilot and co-pilot's reduced ability to control the airplane. This failure could also affect the proper function of the seat restrain system in the case of an emergency landing.

## Compliance

- (e) To address this problem, you must do the following:

| Actions  | Compliance  | Procedures   |
|--|---|--|
| (1) For crew seat bucket assemblies with a recline system, P/Ns 959.30.01.111, 959.30.01.112, 959.30.01.121, and 959.30.01.122 (or FAA-approved equivalent P/Ns), replace the backrest tubes.  | Initially replace upon the accumulation of 5,000 hours time-in-service (TIS) or within the next 100 hours TIS after June 2, 2006 (the effective date of this AD), whichever occurs later, unless already done. Thereafter, replace the backrest tubes upon the accumulation of 5,000 hours TIS (the life limit established in this AD). | Replace following the procedures in the applicable component maintenance manual (CMM). |
| (2) For crew seat bucket assemblies without a recline system, P/Ns 959.30.01.131, 959.30.01.132, 959.30.01.133, and 959.30.01.134 (or FAA-approved equivalent P/Ns), and with less than or equal to 10,000 hours TIS replace the backrest tubes.   | Initially replace upon the accumulation of 10,000 hours TIS or within the next 500 hours TIS after June 2, 2006 (the effective date of this AD), whichever occurs later, unless already done. Thereafter, replace the backrest tubes upon the accumulation of 10,000 hours TIS (the life limit established in this AD).                 | Replace following the procedures in the CMM.   |
| (3) For crew seat bucket assemblies without a recline system, P/Ns 959.30.01.131, 959.30.01.132, 959.30.01.133, and 959.30.01.134 (or FAA-approved equivalent P/Ns), and with greater than 10,000 hours TIS replace the backrest tubes.  | Initially upon the accumulation of 10,500 hours TIS or within the next 100 hours TIS after June 2, 2006 (the effective date of this AD), whichever occurs later, unless already done. Thereafter, replace the backrest tubes upon the accumulation of 10,000 hours TIS (the life limit established in this AD).                         | Replace following the procedures in the CMM.   |
| (4) Do not install:<br>(i) Any crew seat bucket assembly with a recline system, P/N 959.30.01.111, 959.30.01.112, 959.30.01.121, and 959.30.01.122, (or FAA-approved equivalent P/Ns), with unknown hours TIS or which has accumulated 5,000 or more hours TIS; or<br>(ii) Any crew seat bucket assembly without a recline system, P/N 959.30.01.131, 959.30.01.132, 959.30.01.133, and 959.30.01.134 (or FAA-approved equivalent P/Ns), with unknown hours TIS or which has accumulated 10,000 or more hours TIS. | As of June 2, 2006 (the effective date of this AD). The life limits specified in paragraphs (e)(1), (e)(2), and (e)(3) of this AD apply to all parts installed as spares.   | Not applicable.  |

| <b>Actions</b>  | <b>Compliance</b>                                  | <b>Procedures</b> |
|---|--|-------------------|
| (5) 14 CFR 21.303 allows for replacement parts through parts manufacturer approval(PMA). The phrase "or FAA-approved equivalent part number" in this AD is intended to signify those parts that are PMA parts approved through identity to the design of the part under the type certificate and replacement parts to correct the unsafe condition under PMA (other than identity). If parts are installed that are identical to the unsafe parts, then the corrective actions of the AD affect these parts also. In addition, equivalent replacement parts to correct the unsafe condition under PMA (other than identity) may also be installed provided they meet current airworthiness standards, which include those actions cited in this AD. | Not applicable                                     | Not applicable.   |
| (6) You must contact the type certificate holder any time a modification or repair is done that affects the parts listed in paragraphs (e)(1), (e)(2), (e)(3), and (e)(4) of this AD to determine the effect, if any, the modification or repair may have on the life limits established in this AD.  | As of June 2, 2006 (the effective date of this AD) | Not applicable.   |

**Note 1:** The FAA recommends that you return all replaced backrest tubes to Pilatus Aircraft Ltd., Structural Analysis Group ECE, Ch-6371 Stans, Switzerland. Include the following information: crew seat P/N and serial number, aircraft manufacturer serial number, aircraft flying hours, number of flights, and replacement date of the replaced backrest tubes.

**Note 2:** Pilatus PC-12 Aircraft Maintenance Manual Revision 17/Interactive Electronic Technical Publication (IETP) Revision 9, Chapter 4, section 04-00-00, references the crew seat bucket assembly replacements.

### **Alternative Methods of Compliance (AMOCs)**

(f) The Manager, Standards Office, Small Airplane Directorate, FAA, ATTN: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

### **Related Information**

(g) Swiss AD Number HB-2005-470, Effective Date: December 30, 2005, also addresses the subject of this AD.

Issued in Kansas City, Missouri, on April 12, 2006.  
Kim Smith,  
Manager, Small Airplane Directorate, Aircraft Certification Service.  
[FR Doc. 06-3725 Filed 4-18-06; 8:45 am]  
BILLING CODE 4910-13-P